



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2024	M.TECH	IIT Kharagpur	9.09 / 10
2016	MECHANICAL ENGINEERING	COLLEGE OF ENGINEERING GUINDY ANNA UNIVERSITY	8.28 / 10
2012	HSC PUBLIC EXAM	BHARATHI HIGHER SECONDARY SCHOOL	97.58%
2010	SSLC PUBLIC EXAM	BHARATHI HIGHER SECONDARY SCHOOL	97%

INTERNSHIPS

ZF Technology Centre India (CVCS) | Product Innovation | Diagnoz.ai | ML Engineer Intern | May'23-Jul'23
 | **Project:** Modeling of **Wheel Speed Sensor** voltage amplitude and time period signal for **predictive maintenance** of Loose Lug Nut | **Model Algorithms:** Linear regression, Regularized regression, Polynomial regression, Decision Tree, Random Forest and Neural Network | **Model Performance:** Reduced the Model RMSE by 52.86%, MAE by 54.89% & Improved R2 Score by 2.263% using Neural Network as compared to Linear regression.
 • Non project: Worked on publishing Product Innovation Newsletter to enhance visibility of PI team across ZF.

PROJECTS

- 1. Drug Classification | Spring 2023 Machine Learning | Prof. Aritra Hazra, Dept. of CSE, IIT KGP**
 • Built a predictive model with an accuracy of 80% utilizing Decision Tree classifier for Drug Classification
- 2. Covid case prediction | Spring 2023 Machine Learning | Prof. Aritra Hazra, Dept. of CSE, IIT KGP**
 • Implemented the binary ANN classifier to classify Covid Cases with a test accuracy of 65%.
- 3. Instagram User Dynamics using K-Means and Single Linkage Divisive (Top-Down) Clustering Technique | Spring 2023 Machine Learning | Prof. Aritra Hazra, Dept. of CSE, IIT KGP**
 • Implemented the K-means clustering algorithm leveraging cosine similarity to measure data point similarity and evaluated optimal number of clusters as 3 with a Silhouette score of 0.679.
- 4. Optimizing CNN Performance Through Neural Architecture Search approach with LeNet-5 | Spring 2023 Deep Learning | Prof. Debdoot Sheet, Dept. of AI, IIT KGP**
- 5. Exploratory data analysis (EDA) on the Dataset of Harry potter publishings (Self Project)**
- 6. Predicting Climate Classes with Winters Model, ML and DL Models (MTech. Thesis)**

COURSEWORK INFORMATION

Data Analytics | Machine Learning | Deep Learning Foundations and Application | Design Lab | Computational Methods for Earth System Science | Simulation Lab | Remote Sensing | Machine Learning and Deep Learning Specialization by Andrew Ng (Coursera) | German Language Course (A1)

SKILLS AND EXPERTISE

Languages/Tools: Python | QGIS | ArcGIS | Google Earth Pro **Libraries:** Numpy | Pandas | Matplotlib | Seaborn | Plotly | Scikit-Learn | Tensorflow | Keras | Pytorch. **Software:** Jupyter | Anaconda | MS Office | **Soft skills:** Team player | Diligent worker | Presentation skills | Cost working and negotiation skills | Problem solving skills | Self motivated

CERTIFICATIONS

- Completed **Data analytics in earth system science using Python** with **EXCELLENT** grade

WORK EXPERIENCES

Simpson and company limited | Project: SC108/SC213 Diesel engines | Customer : VST, TAFE and Cummins Tractors and Tillers | An astute, dynamic team spirited, competent and performance driven professional with **2.3 years (20.06.2016 to 23.10.2018) of experience** as **GET & Senior Engineer in Supplier Technical Assistance, Sourcing & New product Development** of Diesel Engine components

AWARDS AND ACHIEVEMENTS

- Recipient of the prestigious **DAAD KOSPIE Scholarship** for Master's thesis research on **Predicting Climate Classes using Winters Model, Machine learning and Deep learning Models** at Faculty of **Computer Science** in **TU Dresden Germany** from **September 2023 to March 2024**
- Got **third prize** from **TNSTC** for securing **1171/1200 (third rank in school)** in **HSC Board Examination**
- Got **100% in Mathematics** in **HSC** and **SSLC**

EXTRA CURRICULAR ACTIVITIES

- Participated in NSO camp for 10 days at College of Engineering Guindy (Anna University) during UG
- Got selected for the State Government scholarship programme by scoring top rank in National talent exam in 2009